AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/802,056

Attorney Docket No.: Q80076

REMARKS

Status of the Application

Claims 1-22 are the claims that have been examined in the instant application. Claims 7

and 18 stand rejected under 35 U.S.C. § 112, second paragraph. Claims 7-8, and 18-20 stand

rejected under 35 U.S.C. § 103(a) as being unpatentable over Hutchings (U.S. 6,305,221).

Claims 1-6 and 12-17 are allowed. Claims 10-11, 21-22 stand objected to as being dependent

from a rejected base claim, but would be allowable if rewritten in independent form.

By this Amendment, Applicants hereby amend claim 7 and 18.

Allowable Subject Matter

Applicants thank the Examiner for indicating that claims 1-6 and 12-17 are allowable.

Applicants further thank the Examiner for indication that claims 10-11, 21-22 would be

allowable if rewritten in independent form including all of the limitations of the base claim and

any intervening claims, however, Applicants respectfully request that the Examiner hold any

rewiring in abeyance until the Examiner has had the opportunity to reconsider and withdraw the

prior art rejection of claims 7, 8 and 18-20.

Claim Rejections - 35 U.S.C. § 112

Claim 7 recites the limitation "the gravitational acceleration" in lines 7-8. There is

insufficient antecedent basis for this limitation in the claim.

Applicants hereby amend claim 7 in order to obviate the rejection of claim 7.

Withdrawal of the rejection is hereby respectfully requested.

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Claim 18 recites the limitation "the gravitational acceleration" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Applicants hereby amend claim 18 in order to obviate the rejection of claim 18. Withdrawal of the rejection is hereby respectfully requested.

Claim Rejections - 35 U.S.C. § 103

Claims 7-8, and 18-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hutchings (USP 6,305,221).

Claim 7 recites, in part, "a rotation angle information estimation-computing portion for estimating motion rotation angle information Φ , θ , and Ψ based on acceleration information based on gravitational acceleration separated from the outputted motion acceleration information." The Examiner alleges that Hutching discloses this element of claim 7, citing col. 4, line 43 - col. 5, line 12 and col. 10, lines 5-58. Applicants respectfully disagree.

Hutching discloses a rotational sensor system, wherein the rotational movement of a device may be determined by rotational sensors (col. 4, line 9), or by using magnetometers, along with gravitational measurements (col. 4, line 66-col. 5, line 2). However, in using the magnetometers in conjunction with the gravitational measurements, the gravitational acceleration of the device is determined as separate measurement. However, Hutching fails to disclose that the gravitational acceleration is *separated* from outputted motion acceleration information, as recited in claim 7. Rather when linear accelerometers are used, Hutching discloses using rotational accelerometers in order to determine the rotational movement of a device. Thus, Hutching also fails to disclose *estimating motion rotation angle information* ... based on

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gravitational acceleration separated from the outputted motion acceleration information, as

recited in claim 7. Thus, claim 7 is patentable over the applied art.

Claim 18 recites similar limitations to claim 7, and is patentable for reasons analogous

thereto. Claims 8 and 19-20 are patentable over the applied art at least by virtue of their

respective dependencies.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is

kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

Dion R. Ferguson

Registration No. 59,561

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

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